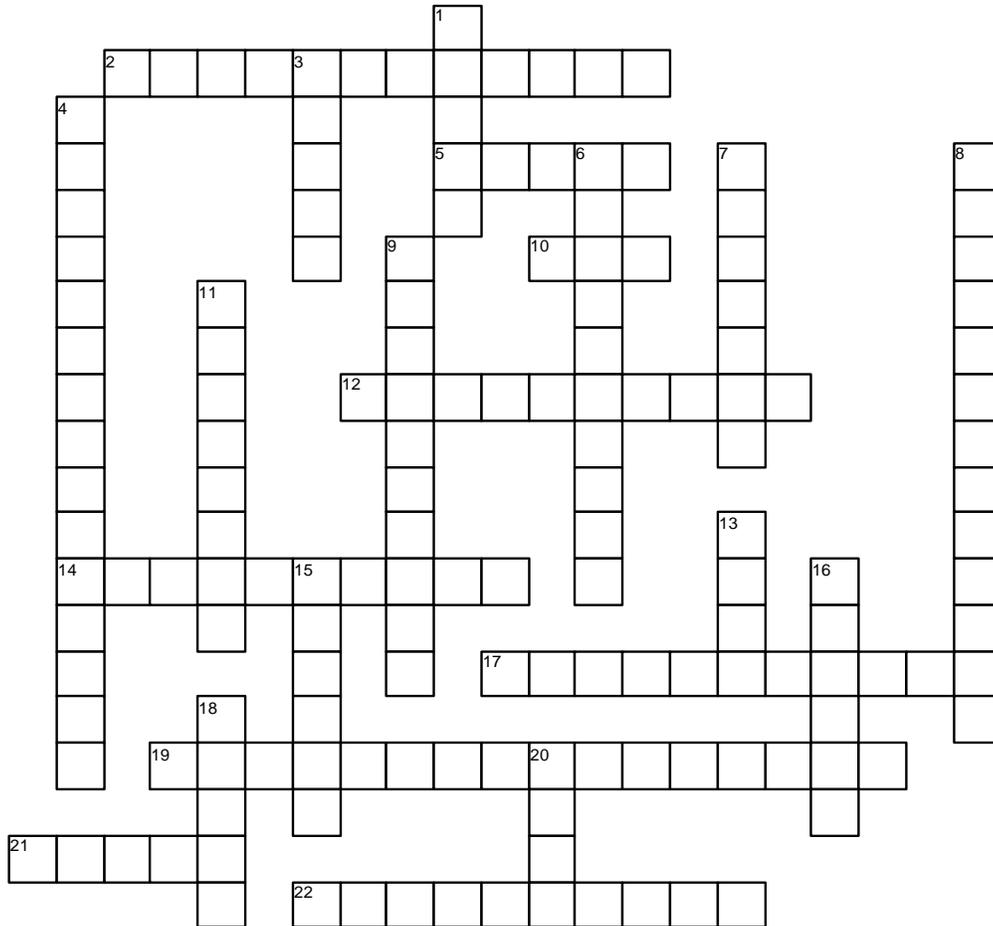


# Tools and Safety

## Chapter 2



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### ACROSS

- 2 \_\_\_\_\_ are required to be available in the areas.
- 5 In fractional bolts, standard combinations of sizes and number of threads per inch (called \_\_\_\_\_) are used.
- 10 \_\_\_\_\_ trouble lights are excellent to use because they are shock resistant, are long lasting, and do not represent a fire hazard.
- 12 A socket can be rotated using a long bar called a \_\_\_\_\_.
- 14 Socket \_\_\_\_\_ and universal joints are used with sockets to allow access to fasteners in restricted locations.
- 17 many smaller fasteners are removed and installed by using a \_\_\_\_\_.
- 19 Class A, Class B, Class C, and Class D are the four \_\_\_\_\_ classes.
- 21 The strength or classification of a bolt is called the \_\_\_\_\_.
- 22 Sockets are available in various \_\_\_\_\_, including 1/4, 3/8, and 1/2 inch sizes for most automotive use.

### DOWN

- 1 Service technicians are often asked to fabricate sheet metal brackets or heat shields and need to use one or more types of cutters available called \_\_\_\_\_.

- 3 Most of the threaded fasteners used on vehicles are \_\_\_\_\_.
- 4 \_\_\_\_\_ is the maximum stress used under tension without causing the failure of a fastener.
- 6 Whenever a fastener is difficult to remove, some technicians will insert the handle of a ratchet or a breaker bar into a length of steel pipe sometimes called a \_\_\_\_\_.
- 7 Service technicians working under a vehicle should wear a \_\_\_\_\_ to protect the head against under-vehicle objects and the pads of the lift.
- 8 Most \_\_\_\_\_ are equipped with a wheel (stone) on one end and a wire brush wheel on the other end.
- 9 The size of a \_\_\_\_\_ is specified by the letter M followed by the diameter in millimeters (mm) across the outside of the threads.
- 11 \_\_\_\_\_ are used to grasp and rotate threaded fasteners.
- 13 Often, a \_\_\_\_\_ will have coarse threads on one end and fine threads on the other end.
- 15 A \_\_\_\_\_ fits over the fastener and grips the points and/or flats of the bolt or nut.
- 16 A \_\_\_\_\_ has a straight, sharp cutting end that is used for cutting off rivets or to separate two pieces of an assembly.
- 18 \_\_\_\_\_ are used to smooth metal and are constructed of hardened steel with diagonal rows of teeth.
- 20 \_\_\_\_\_ are the female part of a threaded fastener.